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LEFT ATRIAL THROMBUS IN PATIENTS PRESENTING FOR CATHETER ABLATION OF ATRIAL FLUTTER

ACC Poster Contributions
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Session Title: Clinical Electrophysiology --Atrial Fibrillation and Flutter
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Background: Catheter ablation of isthmus-dependent atrial flutter has emerged as a durable treatment of atrial flutter. It is common to utilize transesophageal echocardiography (TEE) prior to ablation of atrial flutter in patients with subtherapeutic antiocoagualtion or atrial flutter duration of longer than 48 hours to rule out left atrial thrombus (LAT). This practice is an extrapolation of guidelines regarding atrial fibrillation (afib) and little is known of the prevalence of LAT in patients presenting for atrial flutter ablation. It would be of use to report the prevalence of LAT in patients presenting for ablation of atrial flutter as a validation of current practice standards. It would also be useful to understand the clinical and echocardiographic parameters associated with thrombogenesis in these patients. This would allow for more judicious usage of TEE thus improving patient safety and resource allocation.

Methods: From 11/19/08 to 6/30/2010, 348 consecutive patients underwent TEE prior to atrial flutter ablation. The indications for TEE were previous subtherapeutic anticoagulation or new onset atrial flutter duration of > 48 hrs. All underwent TEE within four days of planned ablation. TEE's were performed by experienced echocardiographers. Clinical data including laboratory parameters, comorbidities, and echocardiographic parameters were recorded in a database.

Results: Of presenting patients, 5.5% (19 of 348) were found to have LAT. Of these patients, 42.1% had comorbid afib. This rate was comparable to patients without LAT, where there was 55.7% rate of comorbid afib. Clinical conditions associated with LAT were diabetes (57.9% vs. 36.0% $p = 0.055$) and prior myocardial infarction (MI) (36.8% vs. 14.8% $p = 0.02$). No two dimensional echocardiographic data were associated with LAT. TEE parameters associated with LAT were spontaneous echo contrast (47.1% vs. 13.1% $p < 0.0001$) and reduced left atrial appendage emptying velocity (27.7 vs 49.4 cm/s, $p < 0.001$).

Conclusions: LAT is a relatively rare but not uncommon finding in patients presenting for atrial flutter ablation. TEE is especially indicated if patients posses comorbid coronary artery disease with previous MI, and diabetes.